

## Description

5 The present invention concerns a gem formation with a plurality of gems with a rear side converging in a point and a flat front side, the gems being embedded in a silicone layer.

10 In particular fashion and jewellery designers frequently express a wish to be supplied with gem formations with a plurality of gems or ornamental stones, which can be easily subjected to further processing. What is essential in that respect is that the gems are stably embedded. Furthermore it is crucial in particular for fashion uses that a kind of fixing is found, which ensures a high level of deformability.

In that connection it is known for gems to be embedded in a metal mesh, although that processing variant involves relatively high costs.

15 Embedding gems in a silicone layer is in principle an inexpensive alternative thereto. The silicone layer ensures on the one hand a secure hold for the gems while on the other hand it is highly bendable and deformable so that the gem formation can be subjected to further processing in many different forms. In addition a piece of any desired size can be easily cut off using a knife or scissors.

20 DE 202 15 384 U1 discloses a latex layer with embedded gems in the form of chatons. Due to the nature of manufacture (liquid latex is poured around the stones), the front side of the stones is disposed in the plane of the surface of the hardenable material which surrounds the stones. Admittedly that gives rise to a kaleidoscopic effect, but the stones as such are no longer visible. In comparison the invention provides that the gems or ornamental stones are only partially embedded in the silicone layer and project with their front side beyond the silicone layer. Positively locking securing of the stones is  
25 achieved by virtue of the fact that the gems are embedded in the silicone layer to beyond the region of their largest diameter.

The tearing strength of the silicone layer can be increased by a cloth or mesh layer additionally being embedded in the silicone layer. A transparent plastic cloth is particularly suitable.

30 The process according to the invention provides that firstly the gems are arranged on an adhesive transfer foil and are dipped into a shallow silicone bath by

means of said transfer foil, wherein the transfer foil is pulled off after hardening of the silicone.

That process guarantees simple and inexpensive processing.

Further features and details of the present invention will be apparent from the specific description hereinafter. In the drawing:

Figure 1 shows a perspective view of a gem formation according to the invention,

Figure 2 shows a corresponding view from above,

Figure 3 shows a view in section taken along line A-A in Figure 2,

Figure 4 shows the detail B in Figure 3 on an enlarged scale, and

Figures 5 and 6 are diagrammatic views showing the steps in the process according to the invention.

As Figures 1 to 4 show, in the gem or ornamental stone formation according to the invention a plurality of gems 1 are embedded in a silicone layer 2. The silicone layer 2 is colourless in the usual manner and is adapted in thickness to the size of the gems 1.

The gems 1 preferably involve stones of ground (faceted) glass which can be transparent or coloured. It is also possible to use other genuine or fake gems.

In the region of the tips of the gems 1, a plastic cloth 3 is cast into the silicone layer 2 in order to increase the tearing strength thereof.

It can be clearly seen from the detail view on an enlarged scale in Figure 4 that the gems 1 are embedded in the silicone layer 2 to beyond the region of their largest diameter, thereby affording a positively locking hold for the gems.

The process according to the invention will now be described with reference to Figures 5 to 8:

The processing apparatus has an upper plate 4a and a lower plate 4b. Arranged on the upper plate 4a is an adhesive transfer foil 5. The gems 1 stick with their flat top side to the transfer foil, in which respect it is possible to select any desired arrangement, in a regular configuration or chaotically.

Disposed in opposite relationship thereto on the lower plate 4b within the delimiting means 6 is the silicone layer 2, which is initially still fluid, of about 1 mm in

thickness. As shown in Figure 6 the gems 1 are immersed in the silicone layer 2 by downward movement of the upper plate 4a.

As soon as the silicone layer 2 has hardened, in the last step in the process the silicone layer 2 with embedded gems 1 is detached from the transfer foil 5.

- 5        If the silicone layer 2 is to be backed with a cloth or mesh layer 3, as is indicated in Figures 3 and 4, that can be effected by gluing the layer 3 on. It is even simpler however if, prior to pouring the silicone 2 into the frame formed by the delimiting means 6, the layer 3 is laid in place so that the silicone as it hardens is fixedly joined to the cloth layer.